SCIENTIFIC WRITING AND PRESENTATION ENT-402

Dr. Muhammad Arshad Department of Entomology College of Agriculture, University of Sargodha <u>makuaf@gmail.com</u>

Literature search

- Literature search is a systematic and well-organised search from the already published data to identify a breadth of good quality references on a specific topic.
- Research problem is typically a topic of interest and of some familiarity to the researcher.
- Once we have narrowed down the problem, seeking and analysing existing literature may further straighten out the research approach.

MAIN STEPS

- Define what you are searching for
- Decide where to search
- Develop a search strategy
- Refine your search strategy
- Save your search for future use.

A literature review is a critical assessment of the literature pertaining to a particular topic or subject.

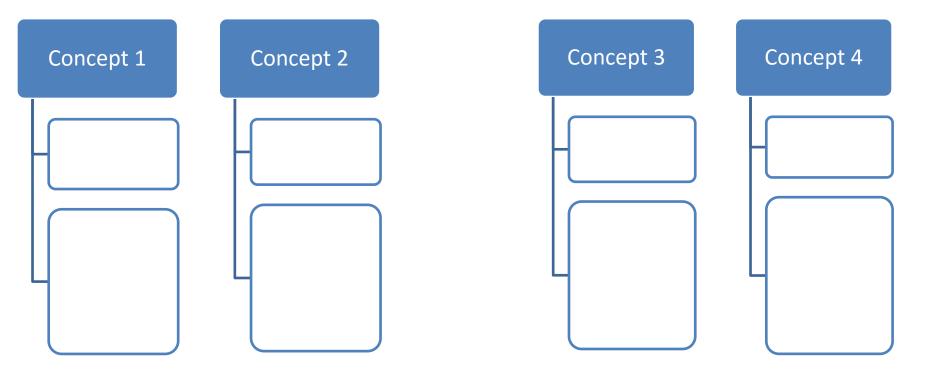
What's its purpose?

- Justify your research
- Provide context for your research
- Identify new ways, to interpret and highlight gaps in previous research
- Ensure that the research has not been done before
- A way forward for further research
- Highlight flaws in previous research

Identify the main concepts in your question

- Once you have a searchable question, highlight the major concepts.
- For example: "In patients with **eating disorders**, how effective is **cognitive behavioural therapy** in improving **self-esteem**?"
- You should then find keywords and phrases to express the different concepts.
- For example, the concept **"eating disorders"** covers a wide range of key terms, including Anorexia and Bulimia.
- It may be useful to create a concept map.
- First identify the major concepts within your question and then organize your appropriate key terms.

Planning the search (A map)



Choose a database

- Find the most appropriate databases for your subject
- Databases help you to find a broad range of evidence, including peer-reviewed academic articles from all over the world, from many different publishers, and over a long time period.
- Databases such as Scopus and Web of Science hold expansive records of research literature, including conference proceedings, letters and grey literature.
- Many databases have links to full-text articles where the Library has a subscription.

Online database

Resource	Web address
Search engines	
Google	http://www.google.com
Google Scholar	http://www.scholar.google.com
Yahoo	http://www.yahoo.com
Electronic source of database	
PubMed	https://www.nlm.nih.gov/pubmed
MeSH	http://www.ncbi.nlm.nih.gov/mesh
Medline (Medical Literature Analysis and Retrieval System Online)	https://www.nlm.nih.gov
CINAHL (The Cumulative Index to Nursing and Allied Health)	https://www.cinahl.com
Embase (Excerpta Medica Database)	https://store.elsevier.com/embase
SCOPUS	https://www.scopus.com/
Ind Med: Indian Database	https://www.medind.nic.in
ERIC	https://www.eric.ed.gov
ProQuest	http://proquest.com

Online databases (most frequently use)

- Science Direct [<u>http://www.sciencedirect.com</u>].
- Wiley Online [<u>http://onlinelibrary.wiley.com</u>].
- Pubmed [<u>https://www.ncbi.nlm.nih.gov/pubmed/</u>].
- CAB abstracts [<u>http://www.cabi.org/</u>].
- BioOne [<u>http://www.bioone.org</u>].
- Google Scholar [<u>https://scholar.google.com/</u>]. Scopus

A search strategy

- A search strategy is an organised structure of key terms used to search a database.
- The search strategy combines the key concepts of your search question in order to retrieve accurate results.
- Your search strategy will account for all:
 - Possible search terms
 - Keywords and phrases
 - Truncated and wildcard variations of search terms
 - Subject headings (where applicable)
- Each database works differently so you need to adapt your search strategy for each database.
- You may wish to develop a number of separate search strategies if your research covers several different areas.

Search strategy techniques

- Skip straight to:
- Choosing search terms
- <u>Searching with keywords</u>
- <u>Searching for exact phrases</u>
- Searching with subject headings
- <u>Citation searching</u>

Further reading

- Byrne, D. (2017). <u>Developing a researchable question</u>. *Project Planner*. 10.4135/9781526408525. Sage Research Methods.
- The <u>Access eresources using Google Scholar</u> page shows how to add the "Find it at OU" button to Google Scholar search results.
- Byrne, D. (2017). <u>Reviewing the literature</u>. *Project Planner*. 10.4135/9781526408518. Sage Research Methods.